MS4 General Permit
Town of West Hartford 2019 Annual Report
Existing MS4 Permittee
Permit Number GSM 000001
[January 1, 2019 – December 31, 2019]

This report documents West Hartford's efforts to comply with the conditions of the MS4 General Permit to the maximum extent practicable (MEP) from January 1, 2019 to December 31, 2019.

Part I: Summary of Minimum Control Measure Activities

1. Public Education and Outreach (Section 6 (a)(1) / page 19)

1.1 BMP Summary

BMP	Status	Activities in current reporting period **(if needed, more space available after this table)**	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
1-1 Implement public education and outreach	Ongoing	Provided stormwater educational materials on the Town website and at Town events. MDC Household Hazardous Waste Collections were held in West Hartford on June 23, 2019 and Sept 21, 2019 Advertised yard waste collection and collection on Town website and by email	Provide stormwater information to residents and the general public	Renee McCue, Public Relations Specialist	Ongoing	2019 tasks complete	Town parks have signs to educate on picking up pet waste Stormwater brochures were distributed at the Public Works Open House in May and Celebrate West Hartford in June
1-2 Address education/ outreach for pollutants of concern*	Complete/ Ongoing	Created stormwater educational materials to target pollutants of concern.	Identify pollutants of concern and incorporate applicable materials	Renee McCue, Public Relations Specialist	Ongoing	2019 tasks complete	

1.2 Describe any Public Education and Outreach activities planned for the next year, if applicable.

Update documents on Town Stormwater website, as needed.
Participate in MDC Household Hazardous Collection.
Continue with pet waste education on Public Works website and in Town Parks with signs.
Distribute stormwater brochure at Town offices, meetings, and events.
Perform Yard Waste Collection twice per year, collect 30-gallon brown leaf bags in fall in spring. Drop-off available for yard waste. Advertise to pubic on website and with emails.

1.3 Details of activities implemented to educate the community on stormwater

Program Element/Activity	Audience (and number of people reached)	Topic(s) covered	Pollutant of Concern addressed (if applicable)	Responsible dept. or partner org.
Distributed tri-fold stormwater brochure	Residents	General stormwater, pollutants, what you can do to help	Bacteria	Renee McCue, Public Relations Specialist
Stormwater Website developed	Residents and general public	Multiple topics	Bacteria, Nitrogen, Phosphorus	Town Engineering
Lawn care: Yard Waste Collection in the spring and fall	Residents	Lawn care		Town DPW
Participated in MDC Household Hazardous Collection	Town-wide	Hazardous waste management		Hartford Metropolitan District Commission

2. Public Involvement/Participation (Section 6(a)(2) / page 21)

2.1 BMP Summary

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
2-1 Final Stormwater Management Plan publicly available	Complete	Stormwater Management Plan available to the public on Town's website	Make the Stormwater Management Plan available to the public	Duane Martin, Town Engineer	Ongoing	Apr 3, 2017	No updates to the Stormwater Management Plan have been made
2-2 Comply with public notice requirements for Annual Reports	Ongoing	Latest annual report will be available to the public on Town's website	Make the latest annual report available to the public	Duane Martin, Town Engineer	Feb 15, 2019	Feb 15, 2019	No public comments were received in 2019

2.2 Describe any Public Involvement/Participation activities planned for the next year, if applicable.

Post Annual Report for public comment on Feb 15, 2020.

Participate in MDC Household Hazardous Waste Collection program, hosted in West Hartford annually.

Perform Yard Waste Collection, twice per year, collect 30-gallon brown leaf bags in fall in spring. Drop-off available for yard waste. Advertise to pubic on website and emails.

2.3 Public Involvement/Participation reporting metrics

Metrics	Implemented	Date	Posted
Availability of the Stormwater Management Plan to public	Yes	Apr 3, 2017	https://www.westhartfordct.gov/gov/departments/engineering/stormwater.asp
Availability of Annual Report announced to public	Yes	Feb 15, 2020	https://www.westhartfordct.gov/gov/departments/engineering/stormwater.asp

3. Illicit Discharge Detection and Elimination (Section 6(*a*)(3) and Appendix B / page 22)

3.1 BMP Summary

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
3-1 Develop written IDDE program	Complete			Duane Martin, Town Engineer	Jul 1, 2018	July 31, 2018	IDDE Plan complete, no updates in 2019
3-2 Develop list and maps of all MS4 stormwater outfalls in priority areas	Complete			Duane Martin, Town Engineer	Jul 1, 2019	Nov 2018	Mapping complete and on Town website for public use
3-3 Implement citizen reporting program	Ongoing	Implemented citizen reporting program	Implement citizen reporting program	John Phillips, Public Works Director	Ongoing	Implementation is ongoing	Mobile 311 system used to track stormwater issues since Nov 2018
3-4 Establish legal authority to prohibit illicit discharges	Complete			Corporation Counsel	Jul 1, 2018	Effective June 30, 2018	
3-5 Develop record keeping system for IDDE tracking	Complete			Duane Martin, Town Engineer	Jul 1, 2017		Mobile 311 and tracking spreadsheet from IDDE Plan
3-6 Address IDDE in areas with pollutants of concern	Complete			Duane Martin, Town Engineer	Not specified	July 1, 2018	Program developed

3.2 Describe any IDDE activities planned for the next year, if applicable.

The Town will continue to do investigations based on prioritization methodology in the IDDE Plan. The first priority will be outfalls where the public, consultant stormwater outfall inspectors, and/or Town staff have noted a visual or olfactory concern. Maintain master IDDE tracking spreadsheet.

3.3 List of citizen reports of suspected illicit discharges received during this reporting period.

Date of Report	Location / suspected source	Response taken
June 4, 2019	Town Staff was made aware of sediment flow into Trout Brook just upstream of New Park Avenue.	Engineering and Planning Division staff investigated the area and found 3 locations contributing to the sediment flow. Sediment was exiting the properties at 637 and 647 New Park Avenue. Both of these properties were under construction and lacking adequate erosion and sedimentation controls. The property owners were notified of the sediment flow and corrective measures were in place by June 6, 2019. Sediment was also flowing due to a utility project on Woodlawn Street. During the construction, a water service broke causing sediment from the construction trench to flow into the drainage system. The water service was shut off, repairs made, which addressed the problem on June 6, 2019.
July 1, 2019	Grease was observed in the drainage system near 37 and 43 LaSalle Road.	The property owner was notified to cease and desist from depositing grease into the drainage system by the West Hartford-Bloomfield Health District (WHBHD). WHBHD required the property owner to clean the drainage system. The cleaning was completed on July 5, 2019.

3.4 Provide a record of illicit discharges occurring during the reporting period and SSOs occurring July 2012 through end of reporting period using the following table.

Location	**Date and duration of occurrence**	**Discharge to MS4 or surface water**	**Estimated volume discharged (Gallons)**	**Known or suspected cause / Responsible party**	**Corrective measures planned and completed**	**Sampling data** (if applicable)
107 Hillcrest Avenue	2/27/2013	Surface Water	3,000,000	Metropolitan District Commission (MDC)	Install Sewer Conveyance and Storage Tunnel to eliminate this SSO (Tunnel)	
Opposite 212 Trout Brook Drive	2/27/2013	Surface Water	161,000	MDC	Tunnel	
Southerly end of Chelton Avenue	2/27/2013	Surface Water	2,045,000	MDC	Tunnel	

107 Hillcrest Avenue	3/12/2013	Surface Water	1,755,000	MDC	Tunnel	
Opposite 212 Trout Brook Drive	3/12/2013	Surface Water	69,000	MDC	Tunnel	
Southerly end of Chelton Avenue	3/12/2013	Surface Water	1,000,000	MDC	Tunnel	
107 Hillcrest Avenue	6/7/2013	Surface Water	2,173,000	MDC	Tunnel	
Opposite 212 Trout Brook Drive	6/7/2013	Surface Water	692,000	MDC	Tunnel	
Southerly end of Chelton Avenue	6/7/2013	Surface Water	3,911,000	MDC	Tunnel	
107 Hillcrest Avenue	6/11/2013	Surface Water	7,776,000	MDC	Tunnel	
Opposite 212 Trout Brook Drive	6/11/2013	Surface Water	1,602,000	MDC	Tunnel	
Southerly end of Chelton Avenue	6/11/2013	Surface Water	10,437,000	MDC	Tunnel	
107 Hillcrest Avenue	6/18/2013	Surface Water	24,000	MDC	Tunnel	
107 Hillcrest Avenue	11/27/2013	Surface Water	190,000	MDC	Tunnel	
Southerly end of Chelton Avenue	11/27/2013	Surface Water	183,000	MDC	Tunnel	
Opposite 212 Trout Brook Drive	12/30/2013	Surface Water	6,110	MDC	Tunnel	
Southerly end of Chelton Avenue	1/9/2014	Surface Water	638,000	MDC	Tunnel	
107 Hillcrest Avenue	2/6/2014	Surface Water	854,000	MDC	Tunnel	
107 Hillcrest Avenue	3/20/2014	Surface Water	108,000	MDC	Tunnel	
107 Hillcrest Avenue	3/29/2014- 4/2/2014	Surface Water	5,329,000	MDC	Tunnel	
Southerly end of Chelton Avenue	3/29/2014-4/2/2014	Surface Water	4,233,000	MDC	Tunnel	
Opposite 212 Trout Brook Drive	4/30/2014	Surface Water	489,000	MDC	Tunnel	
107 Hillcrest Avenue	4/30/2014-5/3/2014	Surface Water	3,473,000	MDC	Tunnel	
107 Hillcrest Avenue	5/1/2014	Surface Water	68,000	MDC	Tunnel	
Southerly end of Chelton Avenue	4/30/2014-5/2/2014	Surface Water	4,283,000	MDC	Tunnel	
Opposite 212 Trout Brook Drive	5/17/2014	Surface Water	797,000	MDC	Tunnel	
107 Hillcrest Avenue	12/9/2014- 12/11/2014	Surface Water	1,545,000	MDC	Tunnel	
Southerly end of Chelton Avenue	12/9/2014	Surface Water	1,674,000	MDC	Tunnel	
Opposite 212 Trout Brook Drive	12/9/2014	Surface Water	128,000	MDC	Tunnel	
107 Hillcrest Avenue	1/18/2015	Surface Water	193,000	MDC	Tunnel	
107 Hillcrest Avenue	3/11/2015	Surface Water	61,000	MDC	Tunnel	
107 Hillcrest Avenue	3/14/2014-3/17/2014	Surface Water	653,000	MDC	Tunnel	
107 Hillcrest Avenue	3/26/2014-3/28/2014	Surface Water	439,000	MDC	Tunnel	
107 Hillcrest Avenue	4/20/2015-422/2015	Surface Water	2,055,000	MDC	Tunnel	

Southerly end of Chelton Avenue	4/20/2014-4/21/2014	Surface Water	2,569,000	MDC	Tunnel	
Opposite 212 Trout Brook Drive	4/20/2015	Surface Water	175,000	MDC	Tunnel	
107 Hillcrest Avenue	1/10/2016	Surface Water	194,000	MDC	Tunnel	
107 Hillcrest Avenue	2/16/2016	Surface Water	72,000	MDC	Tunnel	
107 Hillcrest Avenue	2/24/2016	Surface Water	2,426,000	MDC	Tunnel	
Southerly end of Chelton Avenue	2/24/2016	Surface Water	2,319,000	MDC	Tunnel	
Opposite 212 Trout Brook Drive	2/25/2016	Surface Water	110,000	MDC	Tunnel	
107 Hillcrest Avenue	3/31/2017	Surface Water	1,797,000	MDC	Tunnel	
Southerly end of Chelton Avenue	4/1/2017	Surface Water	1,000	MDC	Tunnel	
107 Hillcrest Avenue	4/4/2014	Surface Water	3,003,000	MDC	Tunnel	
Southerly end of Chelton Avenue	4/4/2017	Surface Water	344,000	MDC	Tunnel	
Southerly end of Chelton Avenue	4/6/2017	Surface Water	707,000	MDC	Tunnel	
107 Hillcrest Avenue	5/5/2017	Surface Water	53,000	MDC	Tunnel	
Talcott Rd and Chelton Ave	10/25/2017	Surface Water	500,000 - 1,000,000	MDC	Tunnel	
West of Hillcrest Ave	10/25/2017	Surface Water	100,000 - 500,000	MDC	Tunnel	
67/69 Levesque Ave	10/29/2017	Basement Backup	100 - 1,000	MDC	MDC CMOM - Jetted mainline sewer 10/29/17	
SSO (NTS - Hillcrest Ave)	10/29/2017	Surface Water	1,000,000 +	MDC	Tunnel	
Talcott Rd and Chelton Ave	10/29/2017	Surface Water	1,000,000 +	MDC	Tunnel	
Trout Brook Dr N/O Quaker La	10/29/2017	Surface Water	100,000 - 500,000	MDC	Tunnel	
101 Woodlawn St	1/6/2018	Surface Water	0	MDC	Caused by water main break that was repaired	
West of Hillcrest Ave	1/12/2018	Surface Water	1,062,000	MDC	Tunnel	
Talcott Rd and Chelton Ave	1/12/2018	Surface Water	334,000	MDC	Tunnel	
West of Hillcrest Ave	2/11/2018	Surface Water	4,991,000	MDC	Tunnel	
Talcott Rd and Chelton Ave	2/11/2018	Surface Water	14,000	MDC	Tunnel	
West of Hillcrest Ave	2/25/2018	Surface Water	5,564,000	MDC	Tunnel	
West of Hillcrest Ave	3/2/2018	Surface Water	7,136,000	MDC	Tunnel	

Talcott Rd and Chelton Ave	3/2/2018	Surface Water	207,000	MDC	Tunnel	
West of Hillcrest Ave	4/16/2018	Surface Water	15,676,000	MDC	Tunnel	
Talcott Rd and Chelton Ave	4/16/2018	Surface Water	4,641,00	MDC	Tunnel	
Near 204 Trout Brook Dr	4/16/2018	Surface Water	1,645,000	MDC	Tunnel	
West of Hillcrest Ave	4/25/2018	Surface Water	1,074,00	MDC	Tunnel	
Talcott Rd and Chelton Ave	4/26/2018	Surface Water	29,000	MDC	Tunnel	
West of Hillcrest Ave	6/28/2018	Surface Water	10,000	MDC	Tunnel	
West of Hillcrest Ave	8/4/2018	Surface Water	1,101,000	MDC	Tunnel	
Near 204 Trout Brook Dr	8/14/2018	Surface Water	<1,000	MDC	Tunnel	
Talcott Rd and Chelton Ave	8/24/2018	Surface Water	<25,000	MDC	Tunnel	
West of Hillcrest Ave	9/3/2018	Surface Water	<50,000	MDC	Tunnel	
Near 204 Trout Brook Dr	9/12/2018	Surface Water	11,000	MDC	Tunnel	
17, 22 Mozart St	9/15/2018	Basement Backup	<100	MDC	CMOM Program - Jetted mainline sewer 9/15/18	
West of Hillcrest Ave	9/25/2018	Surface Water	2,789,000	MDC	Tunnel	
Talcott Rd and Chelton Ave	9/25/2018	Surface Water	574,000	MDC	Tunnel	
Talcott Rd and Chelton Ave	9/25/2018	Surface Water	1,000	MDC	Tunnel	
West of Hillcrest Ave	9/26/2018	Surface Water	574,000	MDC	Tunnel	
West of Hillcrest Ave	9/28/2018	Surface Water	6,000	MDC	Tunnel	
West of Hillcrest Ave	10/2/2018	Surface Water	8,286,000	MDC	Tunnel	
Talcott Rd and Chelton Ave	10/2/2018	Surface Water	128,000	MDC	Tunnel	
Near 204 Trout Brook Dr	10/2/2018	Surface Water	<1,000	MDC	Tunnel	
Basements of multiple homes (~21) in Linbrook Rd area	10/3/2018	Basement Backup, Surface Water	500,000 - 1,000,000	MDC	CMOM Program - Repaired mainline sewer 10/2018	
Linbrook Rd	10/11/2018	Surface Water	<1,000	MDC	CMOM Program	
Talcott Rd and Chelton Ave	11/3/2018	Surface Water	4,500,000	MDC	Tunnel	
West of Hillcrest Ave	11/3/2018	Surface Water	9,171,000	MDC	Tunnel	
Near 204 Trout Brook Dr	11/3/2018	Surface Water	471,000	MDC	Tunnel	
186 Main St	11/3/2018	Basement Backup	<1,000	MDC	CMOM Program	
West of Hillcrest Ave	11/6/2018	Surface Water	4,075,000	MDC	Tunnel	
West of Hillcrest Ave	11/9/2018	Surface Water	15,896,000	MDC	Tunnel	
West of Hillcrest Ave	11/13/2018	Surface Water	9,607,000	MDC	Tunnel	

Talcott Rd and Chelton Ave	11/13/2018	Surface Water	1,245,000	MDC	Tunnel	
Near 204 Trout Brook Dr	11/13/2018	Surface Water	10,000	MDC	Tunnel	
32, 38 Lockwood Terrace	11/20/2018	Basement Backup	<100	MDC	CMOM Program - Jetted mainline sewer 11/20/18	
24 Lockwood Terrace	11/26/2018	Basement Backup	<100	MDC	CMOM Program - Jetted mainline sewer 11/26/18	
West of Hillcrest Ave	11/26/2018	Surface Water	8,521,000	MDC	Tunnel	
Talcott Rd and Chelton Ave	11/26/2018	Surface Water	91,000	MDC	Tunnel	
West of Hillcrest Ave	12/2/2018	Surface Water	2,630,000	MDC	Tunnel	
West of Hillcrest Ave	12/21/2018	Surface Water	11,181,000	MDC	Tunnel	
Talcott Rd and Chelton Ave	12/21/2018	Surface Water	500,000 to 1,000,000	MDC	Tunnel	
Near 204 Trout Brook Dr	12/21/2018	Surface Water	180,000	MDC	Tunnel	
West of Hillcrest Ave	1/1/2019	Surface Water	151,000	MDC	Tunnel	
Talcott Rd and Chelton Ave	1/5/2019	Surface Water	26,000	MDC	Tunnel	
West of Hillcrest Ave	1/5/2019	Surface Water	3,788,000	MDC	Tunnel	
16, 26 Hammick Rd	1/5/2019	Basement Backup	<100	MDC	CMOM Program - Jetted mainline sewer 1/5/19	
Talcott Rd and Chelton Ave	1/24/2019	Surface Water	4,418,000	MDC	Tunnel	
Near 204 Trout Brook Dr	1/24/2019	Surface Water	782,000	MDC	Tunnel	
Siphon inlet chamber	1/24/2019	Surface Water	25,000 to 50,000	MDC	CMOM Program	
West of Hillcrest Ave	1/24/2019	Surface Water	27,669,000	MDC	Tunnel	
Ringgold St	1/24/2019	Surface Water	<25,000	MDC	CMOM Program	
Hillcrest Ave (NTS)	1/1/2019	Surface Water	151,000	MDC	Tunnel	
Talcott Rd (CTS-3)	1/5/2019	Surface Water	30,000	MDC	Tunnel	
Hillcrest Ave (NTS)	1/5/2019	Surface Water	3,700,000	MDC	Tunnel	
16 and 26 Hammick Rd, West Hartford	1/5/2019	Surface Water	<100	MDC	Cleaned sewer	
Fox Meadow Lane, West Hartford	1/15/2019	Surface Water	-	MDC	-	
Talcott Rd (CTS-3)	10/27/2019	Surface Water	7,000	MDC	Tunnel	
59-61 Levesque Ave	10/27/2019	Surface Water	<100	MDC	Main sewer flushed by jet truck and stoppage relieved	
Hillcrest Ave (NTS)	11/24/2019	Surface Water	21,000	MDC	Tunnel	

NTS, CTS-2, CTS-3, Ringgold St, Fox Meadow Lane	1/24/2019	Surface Water	34,000,000	MDC	Tunnel	
Hillcrest Ave (NTS)	2/24/2019	Surface Water	1,200,000	MDC	Tunnel	
Hillcrest Ave (NTS)	3/15/2019	Surface Water	500,000	MDC	Tunnel	
Talcott Rd (CTS-3)	4/15/2019	Surface Water	3,000	MDC	Tunnel	
Hillcrest Ave (NTS)	4/13/19-4/16/19	Surface Water	4,860,000	MDC	Tunnel	
Hillcrest Ave (NTS)	4/20/19-4/23/19	Surface Water	3,000,000	MDC	Tunnel	
Trout Brook Dr (CTS-2)	4/26/19-4/27/19	Surface Water	100,000	MDC	Tunnel	
Talcott Rd (CTS-3)	4/26/19-4/27/19	Surface Water	4,600,000	MDC	Tunnel	
Hillcrest Ave (NTS)	4/26/19 – 4/30/19	Surface Water	17,000,000	MDC	Tunnel	
844-846 Quaker Lane, West Hartford	4/29/2019	Surface Water	200	MDC	Regular maintenance of sewer	
Hillcrest Ave (NTS)	5/6/2019	Surface Water	92,000	MDC	Tunnel	
Hillcrest Ave (NTS)	5/12/2019	Surface Water	5,000	MDC	Tunnel	
Hillcrest Ave (NTS)	5/13/2019	Surface Water	4,760	MDC	Tunnel	
Hillcrest Ave (NTS)	8/7/2019	Surface Water	1,100,000	MDC	Tunnel	
Talcott Rd (CTS-3)	8/7/2019	Surface Water	700,000	MDC	Tunnel	
Trout Brook Dr (CTS-2)	8/7/2019	Surface Water	200,000	MDC	Tunnel	
1018/1028 Trout Brook Dr, West Hartford	8/16/2019	Surface Water	<10	MDC	Cleaned grease	
Ringgold @ Gillette St, West Hartford	8/22/2019	Surface Water	<25,000	MDC	Removal of excess flow	
Trout Brook Dr (CTS-2)	12/9/2019	Surface Water	< 100	MDC	Tunnel	
Talcott Rd (CTS-3)	12/9/2019	Surface Water	1,400,000	MDC	Tunnel	
Hillcrest Ave (NTS)	12/9/19 - 12/11/19	Surface Water	10,400,000	MDC	Tunnel	
Trout Brook Dr (CTS-2)	12/14/2019	Surface Water	183,000	MDC	Tunnel	
Talcott Rd (CTS-3)	12/14/19 – 12/15/19	Surface Water	5,900,000	MDC	Tunnel	
Hillcrest Ave (NTS)	12/14/19 – 12/17/19	Surface Water	7,800,000	MDC	Tunnel	
Hillcrest Ave (NTS)	12/30/2019	Surface Water	6,200,000	MDC	Tunnel	

3.5 Briefly describe the method used to track illicit discharge reports, responses to those reports, and who was responsible for tracking this information.

Reports received through Mobile 311 or other pathways are sent to the Town Engineer for tracking.

3.6 Provide a summary of actions taken to address septic failures using the table below.

Location and nature of structure with failing septic systems	Actions taken to respond to and address the failures	Impacted waterbody or watershed, if known
64 High Ridge Road	Tank and leaching field replaced	
18 The Crossways	Tank and leaching field replaced	
14 Dodge Drive	Tank replacement	
11 Stonebridge Lane	Distribution Box and pipe replacement	
51 Mountain Farm Road	Distribution Box and pipe replacement	

3.7 IDDE reporting metrics

Metrics	
Estimated or actual number of MS4 outfalls	~450
Estimated or actual number of interconnections	22
Outfall mapping complete	100%
Interconnection mapping complete	98%
System-wide mapping complete (detailed MS4 infrastructure)	100%
Outfall assessment and priority ranking	100%
Dry weather screening of all High and Low priority outfalls complete	286
Catchment investigations complete	0 (3 started)
Estimated percentage of MS4 catchment area investigated	0%

3.8 Briefly describe the IDDE training for employees involved in carrying out IDDE tasks including what type of training is provided and how often is it given (minimum once per year).

An overview of IDDE was presented to Town staff in a powerpoint presentation with a focus on identifying and reporting illicit connections. The Town has hired a consultant to work with DPW staff on IDDE investigations, which provides Town staff with experience performing field investigations.

4. Construction Site Runoff Control (Section 6(a)(4) / page 25)

4.1 BMP Summary

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
4-1 Implement, upgrade, and enforce land use regulations or other legal authority to meet requirements of MS4 general permit	Ongoing	Updated legal authority		Corporation Counsel	Jul 1, 2019	Jul 1, 2020	Enforcing existing regulations
4-2 Develop/Implement plan for interdepartmental coordination in site plan review and approval	Ongoing	Implemented interdepartmental coordination plan		Todd Dumais, Town Planner	Ongoing	Ongoing	Development Complete
4-3 Review site plans for stormwater quality concerns	Ongoing	Performed site plan reviews for stormwater quality concerns		Todd Dumais, Town Planner	Ongoing	Ongoing	
4-4 Conduct site inspections	Ongoing	Performed site inspections		Todd Dumais, Town Planner	Ongoing	Ongoing	
4-5 Implement procedure to allow public comment on site development	Ongoing	Projects are listed on P&Z website		Todd Dumais, Town Planner	Ongoing	Ongoing	Procedure implemented, notification ongoing
4-6 Implement procedure to notify developers about DEEP construction stormwater permit	Ongoing	Implemented a procedure to notify developers of DEEP construction stormwater permit		Todd Dumais, Town Planner	Ongoing	Ongoing	Procedure implemented, notification ongoing

4.2 Describe any Construction Site Runoff Control activities planned for the next year, if applicable.

Continue to advance process of obtaining additional legal authority.

Continue implement interdepartmental coordination.

Continue site inspections: Town zoning enforcement officer on smaller projects; third party inspection on larger projects.

Update permit forms on website for developers

5. Post-construction Stormwater Management (Section 6(*a*)(5) / page 27)

5.1 BMP Summary

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
5-1 Establish and/or update legal authority and guidelines regarding LID and runoff reduction in site development planning	Ongoing	Evaluated current regulations and develop regulations to establish legal authority	New regulations	Todd Dumais, Town Planner	Jul 1, 2021	Jul 1, 2021	
5-2 Enforce LID/runoff reduction requirements for development and redevelopment projects	Ongoing	Enforced current regulations	Enforce current regulations	Todd Dumais, Town Planner	Ongoing beginning Jul 1, 2019	Ongoing	
5-3 Identify retention and detention ponds in priority areas	Ongoing	Town began to compile a list of retention and detention ponds with a description, and party responsible for maintenance	Develop long-term maintenance plan	Duane Martin, Town Engineer	Jul 1, 2019	Jul 1, 2020	
5-4 Implement long-term maintenance plan for stormwater basins and treatment structures	Ongoing	Town began impelmenation of stormwater basin maintenance	Maintain and track stormwater basin maintenance	Duane Martin, Town Engineer John Phillips, Public Works Director	Ongoing beginning Jul 1, 2019	Ongoing	
5-5 DCIA mapping	Complete	Calculated baseline DCIA for each outfall	Summary table of DCIA information	Duane Martin, Town Engineer	Jul 1, 2020	Sept 2019	
5-6 Address post-construction issues in areas with pollutants of concern	Ongoing	Identified projects in catchment areas that discharge to impaired waters	Summary table of catchments that discharge to impaired waters	Todd Dumais, Town Planner Duane Martin, Town Engineer	Not specified	Ongoing	

5.2 Describe any Post-Construction Stormwater Management activities planned for the next year, if applicable.

Continue to advance process of obtaining additional legal authority. Continue to identify retention and detention ponds in the priority area. Continue to maintain Town-owned retention basins and detention basins.

5.3 Post-Construction Stormwater Management reporting metrics

Metrics	
Baseline (2012) Directly Connected Impervious Area (DCIA)	xx acres
DCIA disconnected (redevelopment plus retrofits)	acres this year / acres total
Retrofits completed	0
DCIA disconnected	% this year / % total since 2012
Estimated cost of retrofits	$0
Detention or retention ponds identified	# this year /# total

5.4 Briefly describe the method to be used to determine baseline DCIA.

The methodology to be used for determining DCIA is to delineate the catchments to each outfall (this is what is taking place now), evaluate the connectivity level of each catchment, and then calculate DCIA using what is recommended by CT NEMO option 2. See attached link. This will be supplemented by option #3 for catchments/basins that are near the 11% cut off. https://nemo.uconn.edu/ms4/tasks/mapping.htm

6. Pollution Prevention/Good Housekeeping (Section 6(*a*)(6) / page 31)

6.1 BMP Summary

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
6-1 Develop/implement formal employee training program	Ongoing	Performed employee training	Complete annual staff training	John Phillips, Public Works Director	Ongoing	Ongoing	2019: Jan 16, 2020
6-2 Implement MS4 property and operations maintenance	Ongoing	Implemented SOPs	Tracking of maintenance with prioritization	John Phillips, Public Works Director	Ongoing beginning Jul 1, 2018	Ongoing	SOPs developed on lawn care, sweeping, catch basin cleaning, herbicides
6-3 Implement coordination with interconnected MS4s	Ongoing	Identified contacts at interconnected MS4s, including CT DOT	Identify and contact interconnected MS4s	Duane Martin, Town Engineer	Not specified	Ongoing	In progress – identifying correct contact people
6-4 Develop/implement program to control other sources of pollutants to the MS4	Ongoing	Developed and implemented pollutant source control program	Develop and implement pollutant source control program	Duane Martin, Town Engineer	Not specified	Ongoing	
6-5 Evaluate additional measures for discharges to impaired waters*	Ongoing	Developed and implemented procedures for reducing discharges to impaired waters	Develop turf management and source management program	John Phillips, Public Works Director	Not specified	Ongoing	
6-6 Track projects that disconnect DCIA	Ongoing	Tracked DCIA percentage	Track DCIA percentage	Todd Dumais, Town Planner Duane Martin, Town Engineer	Ongoing	Ongoing	
6-7 Implement infrastructure repair/rehab program	Ongoing	Evaluated infrastructure repair and rehabilitated MS4 infrastructure	Evaluate MS4 infrastructure and develop a repair/rehab program	Duane Martin, Town Engineer	Jul 1, 2021	Ongoing	Through the Capital Improvement Planning: annual budget allocates funds for stormwater projects
6-8 Develop/implement plan to identify/prioritize retrofit projects	Ongoing	Identified projects to reduce DCIA to determine if retrofit projects will be needed	Track projects that reduce DCIA	Todd Dumais, Town Planner Duane Martin, Town Engineer	Jul 1, 2020	Ongoing	

6-9 Implement retrofit projects to disconnect 2% of DCIA	Not Started			Todd Dumais, Town Planner Duane Martin, Town Engineer	Jul 1, 2022	Jul 1, 2022	
6-10 Develop/implement street sweeping program	Ongoing	Perform annual street sweeping	Perform annual street sweeping	John Phillips, Public Works Director	Ongoing beginning Jul 1, 2017	Ongoing	
6-11 Develop/implement catch basin cleaning program	Ongoing	Developed and implemented catch basin cleaning and inspection procedures	Perform prioritized annual catch basin cleaning	John Phillips, Public Works Director	Ongoing beginning Jul 1, 2020	Ongoing	
6-12 Develop/implement snow management practices	Ongoing	Implemented snow management measures and practices	Track snow management information	John Phillips, Public Works Director	Ongoing beginning Jul 1, 2018	Ongoing	SOP for snow management previously developed

6.2 Describe any Pollution Prevention/Good Housekeeping activities planned for the next year, if applicable.

Employee training with Town staff focused on engineering, planning, and health department

Coordinate with interconnected MS4s

Continue to implement turf management program

Track DCIA percentage

Repair and rehabilitated MS4 infrastructure

Continue annual street sweeping

Continue annual catch basin cleaning

Continue to implement snow management practices

6.3 Pollution Prevention/ Good Housekeeping reporting metrics

Metrics	
Employee training provided for key staff	1/16/2020
Street sweeping	
Curb miles swept	miles

Volume (or mass) of material collected	lbs or tons
Catch basin cleaning	
Total catch basins in priority areas	~1,770
Total catch basins in MS4	~6,500
Catch basins inspected	2,324
Catch basins cleaned	370
Volume (or mass) of material removed from all catch basins	92.5 tons
Volume removed from catch basins to impaired waters (if known)	unknown
Snow management	
Type(s) of deicing material used	Treated salt / salt
Total amount of each deicing material applied	3,662 tons / 600 tons
Type(s) of deicing equipment used	
Lane-miles treated	42,620 miles
Snow disposal location	
Staff training provided on application methods & equipment	Nov 2019
Municipal turf management program actions (for permittee properties in basins with N/P impairments)	
Reduction in application of fertilizers (since start of permit)	lbs or %
Reduction in turf area (since start of permit)	acres
Lands with high potential to contribute bacteria (dog parks, parks with open water, & sites with failing septic systems)	
Cost of mitigation actions/retrofits	$0

6.4 Catch basin cleaning program

Provide any updates or modifications to your catch basin cleaning program
The catch basin optimization plan is an informal plan that is being documented through the work order system. A part-time employee inspected catch basins to develop a baseline for future catch basin cleaning; catch basins that are found to be greater than 50% full are put on a list to be cleaned.

6.5 Retrofit program

Briefly describe the Retrofit Program identification and prioritization process, the projects selected for implementation, the rationale for the selection of those projects and the total DCIA to be disconnected upon completion of each project.
The Town is identifying existing and proposed public and private projects to meet the 2% DCIA reduction.

Describe plans for continuing the Retrofit program and how to achieve a goal of 1% DCIA disconnection in future years.
The Town is determining what % DCIA disconnection will be achieved through existing and proposed redevelopment projects.

Describe plans for continuing the Retrofit program beyond this permit term with the goal to disconnect 1% DCIA annually over the next 5 years.
The Town has not yet initiated a retrofit program for future years.

Part II: Impaired waters investigation and monitoring

1. Impaired waters investigation and monitoring program

1.1 Indicate which stormwater pollutant(s) of concern occur(s) in your municipality or institution. This data is available on the MS4 map viewer: http://s.uconn.edu/ctms4map.

Nitrogen/ Phosphorus ☐ Bacteria ☒ Mercury ☐ Other Pollutant of Concern ☐

1.2 Describe program status.

Discuss 1) the status of monitoring work completed, 2) a summary of the results and any notable findings, and 3) any changes to the Stormwater Management Plan based on monitoring results.
Outfall screening and sampling during wet and dry weather has begun, a summary of the results is below.

2. Screening data for outfalls to impaired waterbodies (Section 6(i)(1) / page 41)

2.1 Screening data

Complete the table below for any outfalls screened during the reporting period. Each Annual Report will add on to the previous year's screening data showing a cumulative list of outfall screening data.

2019 Data

Outfall ID	Date of Observation	Parameter	E. Coli cfu/100mL	Name of Laboratory Used	Follow-up required?
OF-2401-2	10/14/2019	Bacteria	350	Phoenix	No
OF-5641-3	10/14/2019	Bacteria	<10	Phoenix	No
OF-0181-8	10/14/2019	Bacteria	2760	Phoenix	Yes
OF-5641-20	10/14/2019	Bacteria	<10	Phoenix	No
OF-3321-2	10/14/2019	Bacteria	73	Phoenix	No
OF-2361-2	10/25/2019	Bacteria	10	Phoenix	No
OF-2361-3	10/25/2019	Bacteria	201	Phoenix	No
OF-4081-1	10/29/2019	Bacteria	158	Phoenix	No
OF-4081-2	10/29/2019	Bacteria	355	Phoenix	No
OF-I84-57	10/29/2019	Bacteria	1660	Phoenix	Yes
OF-0311-4	10/29/2019	Bacteria	538	Phoenix	Yes
OF-4501-1	11/11/2019	Bacteria	10	Phoenix	No
OF-4501-3	11/11/2019	Bacteria	10	Phoenix	No
OF-4501-4	11/11/2019	Bacteria	19900	Phoenix	Yes
OF-6281-5	11/14/2019	Bacteria	10	Phoenix	No

OF-1461-3	11/14/2019	Bacteria	<10	Phoenix	No
OF-1521-1	11/14/2019	Bacteria	<10	Phoenix	No
OF-4901-3	11/14/2019	Bacteria	<10	Phoenix	No
OF-1661-1	11/20/2019	Bacteria	**7270**	Phoenix	Yes
OF-4901-1	11/20/2019	Bacteria	**933**	Phoenix	Yes
OF-0171-1	11/20/2019	Bacteria	216	Phoenix	No
OF-4581-2	11/20/2019	Bacteria	**>24200**	Phoenix	Yes
OF-4311-1	11/20/2019	Bacteria	0	Phoenix	No
OF-4631-1	11/20/2019	Bacteria	**24200**	Phoenix	Yes
OF-6211-1	11/21/2019	Bacteria	<10	Phoenix	No
OF-6211-3	11/21/2019	Bacteria	100	Phoenix	No
OF-3961-1	11/21/2019	Bacteria	**850**	Phoenix	Yes
OF-2991-6	11/21/2019	Bacteria	200	Phoenix	No
OF-1029-1	11/21/2019	Bacteria	246	Phoenix	No
OF-4701-1	11/21/2019	Bacteria	200	Phoenix	No
OF-0741-2	11/22/2019	Bacteria	**9800**	Phoenix	Yes
OF-0741-3	11/22/2019	Bacteria	213	Phoenix	No
OF-5311-2	11/22/2019	Bacteria	110	Phoenix	No
OF-3431-1	11/22/2019	Bacteria	393	Phoenix	No
OF-3731-1	12/27/2019	Bacteria	10	Phoenix	No
OF-1981-6	12/27/2019	Bacteria	**771**	Phoenix	Yes
OF-2221-1	12/27/2019	Bacteria	**960**	Phoenix	Yes
OF-5081-1	12/27/2019	Bacteria	**410**	Phoenix	Yes
OF-2841-2	12/27/2019	Bacteria	**5910**	Phoenix	Yes
OF-6001-2	12/27/2019	Bacteria	309	Phoenix	No
OF-4621-1	12/27/2019	Bacteria	**2030**	Phoenix	Yes
OF-4621-2	12/27/2019	Bacteria	31	Phoenix	No
OF-4281-1	1/2/2020	Bacteria	171	Phoenix	No
OF-0181-5	1/2/2020	Bacteria	31	Phoenix	No
OF-2581-1	1/2/2020	Bacteria	<10	Phoenix	No
OF-0181-1	1/2/2020	Bacteria	10	Phoenix	No
OF-2318-1	1/2/2020	Bacteria	<10	Phoenix	No
OF-1061-1	1/2/2020	Bacteria	<100	Phoenix	No

2018 Data

Old Outfall ID	New Outfall ID	Sample date	Parameter (Nitrogen, Phosphorus, Bacteria, or Other pollutant of concern)	Results E. coli (cfu/100mL)	Name of Laboratory (if used)	Follow-up required?
214	OF-5641-018	4/16/2018	Bacteria	1040	Phoenix	Yes
216	OF-5641-016	4/16/2018	Bacteria	3780	Phoenix	Yes
218	OF-0731-001	4/16/2018	Bacteria	10,500	Phoenix	Yes
204	OF-2547-001	4/16/2018	Bacteria	1440	Phoenix	Yes
205	OF-2547-002	4/16/2018	Bacteria	146	Phoenix	No
NEW_9456	OF-2547-003	4/16/2018	Bacteria	2610	Phoenix	Yes
206	OF-1091-001	4/16/2018	Bacteria	1990	Phoenix	Yes
180	OF-6361-001	4/16/2018	Bacteria	813	Phoenix	Yes
162	OF-1981-006	4/16/2018	Bacteria	759	Phoenix	Yes
164	OF-2021-001	4/16/2018	Bacteria	1400	Phoenix	Yes
14304	OF-3321-003	4/16/2018	Bacteria	9800	Phoenix	Yes
New_9445	OF-1981-008	4/16/2018	Bacteria	368	Phoenix	No
435	OF-5096-003	4/16/2018	Bacteria	318	Phoenix	No
443	OF-5641-044	4/16/2018	Bacteria	110	Phoenix	No
NEW_13881	OF-5096-001	4/16/2018	Bacteria	1270	Phoenix	Yes
434	OF-5096-002	4/16/2018	Bacteria	1300	Phoenix	Yes
221	OF-1981-009	4/16/2018	Bacteria	723	Phoenix	Yes
222	OF-5641-007	4/16/2018	Bacteria	402	Phoenix	No
305	OF-5641-008	4/16/2018	Bacteria	2280	Phoenix	Yes
306	OF-5641-009	4/16/2018	Bacteria	767	Phoenix	Yes
NEW_15104	OF-0531-007	4/16/2018	Bacteria	565	Phoenix	Yes
NEW_13895	OF-1891-010	4/16/2018	Bacteria	109	Phoenix	No
225	OF-3321-001	4/16/2018	Bacteria	2760	Phoenix	Yes
NEW_13878	OF-1011-001	4/25/2018	Bacteria	63	Phoenix	No
447	OF-1011-002	4/25/2018	Bacteria	256	Phoenix	No
224	OF-5641-001	4/25/2018	Bacteria	7700	Phoenix	Yes
309	OF-0531-006	4/25/2018	Bacteria	1500	Phoenix	Yes
219	OF-5641-013	4/25/2018	Bacteria	2760	Phoenix	Yes
214	OF-5641-018	4/16/2018	Bacteria	1040	Phoenix	Yes
216	OF-5641-016	4/16/2018	Bacteria	3780	Phoenix	Yes
218	OF-0731-001	4/16/2018	Bacteria	10,500	Phoenix	Yes

2.2 Credit for screening data collected under 2004 permit

If any outfalls to impaired waters were sampled under the 2004 MS4 permit, that data can count towards the monitoring requirements under the modified 2017 MS4 permit. Complete the table below to record sampling data for any outfalls to impaired waters under the 2004 MS4 permit.

Outfall	**Sample date**	**Parameter** (Nitrogen, Phosphorus, Bacteria, or Other pollutant of concern)	**Results** E. coli (cfu/100mL)	**Name of Laboratory (if used)**	**Follow-up required?**
OF-3961-002: #1 Oakwood Ave @ Trout Brook	8/16/2010	E. coli	**1660**	Phoenix	Yes
OF-3771-013: #2 New Britain Ave @ South St	8/16/2010	E. coli	**1150**	Phoenix	Yes
OF-5641-022: #3 Ballard Dr @ East Branch Trout Brook	8/16/2010	E. coli	**1350**	Phoenix	Yes
OF-1981-008: #4 Fern St @ Trout Brook	8/16/2010	E. coli	**>24,200**	Phoenix	Yes
OF-4501-001: #5 Red Top Dr @ Rockledge Brook	8/16/2010	E. coli	**>24,200**	Phoenix	Yes
OF-4131-008: #6 Park Rd @ Kennedy Brook	8/16/2010	E. coli	>50	Phoenix	Result inconclusive

*Follow-up investigation required (last column) if the following pollutant thresholds are exceeded:

Pollutant of concern	Pollutant threshold
Nitrogen	Total N > 2.5 mg/l
Phosphorus	Total P > 0.3 mg/l
Bacteria (fresh waterbody)	• E. coli > 235 col/100ml for swimming areas or **410 col/100ml for all others** • Total Coliform > 500 col/100ml
Bacteria (salt waterbody)	• Fecal Coliform > 31 col/100ml for Class SA and > 260 col/100ml for Class SB • Enterococci > 104 col/100ml for swimming areas or 500 col/100 for all others
Other pollutants of concern	Sample turbidity is 5 NTU > in-stream sample

3. **Follow-up investigations** (Section 6(i)(1)(D) / page 43)

Provide the following information for outfalls exceeding the pollutant threshold.

Outfall	Status of drainage area investigation	Control measure implementation to address impairment
OF-3321-1	Initiated IDDE investigations in Nov 2019 due to high bacteria at outfall and sewage odor. In 2020, the recommendation is to CCTV the storm drain.	
OF-1981-6	Initiated IDDE investigations in Nov 2019, the dry weather flow is suspected to be from groundwater infiltration into the deep storm drain. In 2020, further investigations recommended.	

OF-1981-8	Initiated IDDE investigations in Nov 2019 due to high bacteria at outfall and a chlorine detection. In 2020, further investigations recommended include CCTV of select pipes and a check in the summer to see if the public pool or splash pad was the source of the chlorine.	

4. **Prioritized outfall monitoring** (Section 6(i)(1)(D) / page 43)

Once outfall screening has been completed for at least 50% of outfalls to impaired waters, identify 6 of the highest contributors of any pollutants of concern. Begin monitoring these outfalls on an annual basis by July 1, 2020.

Outfall	Sample Date	Parameter(s)	Results	Name of Laboratory (if used)

Part III: Additional IDDE Program Data

1. Assessment and Priority Ranking of Catchments data (Appendix B (A)(7)(c) / page 5)

Provide a list of all catchments with ranking results (DEEP basins may be used instead of manual catchment delineations).

1. Catchment ID (DEEP Basin ID)	2. Category	3. Rank

2. Outfall and Interconnection Screening and Sampling data (Appendix B (A)(7)(d) / page 7)

2.1 Dry weather screening and sampling data from outfalls and interconnections

Provide sample data for outfalls where flow is observed. Only include Pollutant of concern data for outfalls that discharge into stormwater impaired waterbodies.

Outfall / Interconnection ID	Screening / sample date	Ammonia	Chlorine	Conductivity	Salinity	E. coli or enterococcus	Surfactants	Water Temp	Pollutant of concern	If required, follow-up actions taken

2.2 Wet weather sample and inspection data

Provide sample data for outfalls and key junction manholes of any catchment area with at least one System Vulnerability Factor.

Outfall / Interconnection ID	Sample date	Ammonia	Chlorine	Conductivity	Salinity	E. coli or Enterococcus	Surfactants	Water Temp	Pollutant of concern

3. **Catchment Investigation data** (Appendix B (A)(7)(e) / page 9)

3.1 System Vulnerability Factor Summary

For those catchments being investigated for illicit discharges (i.e. categorized as high priority, low priority, or problem) document the presence or absence of System Vulnerability Factors (SVF). If present, report which SVF's were identified. An example is provided below.

Outfall ID	Receiving Water	System Vulnerability Factors

Where SVFs are:

1. History of SSOs, including, but not limited to, those resulting from wet weather, high water table, or fat/oil/grease blockages.
2. Sewer pump/lift stations, siphons, or known sanitary sewer restrictions where power/equipment failures or blockages could readily result in SSOs.
3. Inadequate sanitary sewer level of service (LOS) resulting in regular surcharging, customer back-ups, or frequent customer complaints.
4. Common or twin-invert manholes serving storm and sanitary sewer alignments.
5. Common trench construction serving both storm and sanitary sewer alignments.
6. Crossings of storm and sanitary sewer alignments.
7. Sanitary sewer alignments known or suspected to have been constructed with an underdrain system;
8. Sanitary sewer infrastructure defects such as leaking service laterals, cracked, broken, or offset sanitary infrastructure, directly piped connections between storm drain and sanitary sewer infrastructure, or other vulnerability factors identified through Inflow/Infiltration Analyses, Sanitary Sewer Evaluation Surveys, or other infrastructure investigations.
9. Areas formerly served by combined sewer systems.
10. Any sanitary sewer and storm drain infrastructure greater than 40 years old in medium and densely developed areas.
11. Widespread code-required septic system upgrades required at property transfers (indicative of inadequate soils, water table separation, or other physical constraints of the area rather that poor owner maintenance).
12. History of multiple local health department or sanitarian actions addressing widespread septic system failures (indicative of inadequate soils, water table separation, or other physical constraints of the area rather that poor owner maintenance).

3.2 Key junction manhole dry weather screening and sampling data

Key Junction Manhole ID	Screening / Sample date	Visual/ olfactory evidence of illicit discharge	Ammonia	Chlorine	Surfactants

3.3 Wet weather investigation outfall sampling data

Outfall ID	Sample date	Ammonia	Chlorine	Surfactants

3.4 Data for each illicit discharge source confirmed through the catchment investigation procedure

Discharge location	Source location	Discharge description	Method of discovery	Date of discovery	Date of elimination	Mitigation or enforcement action	Estimated volume of flow removed

Part IV: Certification

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement made in this document or its attachments may be punishable as a criminal offense, in accordance with Section 22a-6 of the Connecticut General Statutes, pursuant to Section 53a-157b of the Connecticut General Statutes, and in accordance with any other applicable statute."	
Chief Elected Official or Principal Executive Officer	Document Prepared by
Print name:	Print name:
Signature / Date:	Signature / Date: